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15 (New). A method of manufacturing a semiconductor device, comprising steps of:

forming at least one semiconductor island over a substrate;

spinning the substrate by using a spinning apparatus;

contacting an etching solution to a surface of said semiconductor island and scattering the etching solution during said spinning, thereby contaminating impurities are removed from the surface; and then

forming an insulating film over said semiconductor island.

16 (New). A method according to claim 15, wherein said etching solution is selected from the group consisting of the acidic solution containing fluorine: hydrofluoric acid, dilute hydrofluoric acid, ammonium fluoride, buffered hydrofluoric acid (BHF), hydrofluoric acid and aqueous hydrogen peroxide (FPM), and a solution mixture including ammonium hydrofluoride ( $\text{NH}_4\text{HF}_2$ ) and ammonium fluoride ( $\text{NH}_4\text{F}$ ) ( LAL500).

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17 (New). A method according to claim 15, wherein the contaminating impurity is at least one element selected from periodic table group 1 elements or periodic table group 2 elements.

18 (New). A method according to claim 15, wherein the contaminating impurity element is at least one element selected from the group consisting of Na, K, Mg, Ca, and Ba.

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19 (New). A method of manufacturing a semiconductor device, comprising steps of:

forming a semiconductor film over a substrate;

crystallizing said semiconductor film;

forming at least one semiconductor island over said substrate by patterning the crystallized semiconductor film ;

spinning the substrate by using a spinning apparatus;

contacting an etching solution to a surface of said semiconductor island and scattering the etching solution during said spinning, thereby contaminating impurities are removed from the surface; and then

forming a gate insulating film over said semiconductor island; and

forming a gate electrode over said gate insulating film.

20 (New). A method according to claim 19, wherein said etching solution is selected from the group consisting of the acidic solution containing fluorine: hydrofluoric acid, dilute hydrofluoric acid, ammonium fluoride, buffered hydrofluoric acid (BHF), hydrofluoric acid and aqueous hydrogen peroxide (FPM), and a solution mixture including ammonium hydrofluoride ( $\text{NH}_4\text{HF}_2$ ) and ammonium fluoride ( $\text{NH}_4\text{F}$ ) ( LAL500).

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21 (New). A method according to claim 19, wherein the contaminating impurity is at least one element selected from periodic table group 1 elements or periodic table group 2 elements.

22 (New). A method according to claim 19, wherein the contaminating impurity element is at least one element selected from the group consisting of Na, K, Mg, Ca, and Ba.

23 (New). A method of manufacturing a semiconductor device, comprising steps of:

forming gate wirings over a substrate;

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~~spinning the substrate by using a spinning apparatus;  
contacting an etching solution to surfaces of said substrate and said gate wirings and  
scattering the etching solution during said spinning, thereby contaminating impurities are removed  
from the surfaces; and then  
forming an insulating film over said gate wirings.~~

24 (New). A method according to claim 23, wherein said etching solution is selected from the group consisting of the acidic solution containing fluorine: hydrofluoric acid, dilute hydrofluoric acid, ammonium fluoride, buffered hydrofluoric acid (BHF), hydrofluoric acid and aqueous hydrogen peroxide (FPM), and a solution mixture including ammonium hydrofluoride ( $\text{NH}_4\text{HF}_2$ ) and ammonium fluoride ( $\text{NH}_4\text{F}$ ) (LAL500).

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25 (New). A method according to claim 23, wherein the contaminating impurity is at least one element selected from periodic table group 1 elements or periodic table group 2 elements.

26 (New). A method according to claim 23, wherein the contaminating impurity element is at least one element selected from the group consisting of Na, K, Mg, Ca, and Ba.

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~~27 (New). A method of manufacturing a semiconductor device, comprising steps of:  
forming gate wirings over a substrate;  
spinning the substrate by using a spinning apparatus;~~

contacting an etching solution to surfaces of said substrate and said gate wirings and scattering the etching solution during said spinning, thereby contaminating impurities are removed from the surfaces; and then forming a gate insulating film and a semiconductor film over said gate wirings, continuously.

28 (New). A method according to claim 27, wherein said etching solution is selected from the group consisting of the acidic solution containing fluorine: hydrofluoric acid, dilute hydrofluoric acid, ammonium fluoride, buffered hydrofluoric acid (BHF), hydrofluoric acid and aqueous hydrogen peroxide (FPM), and a solution mixture including ammonium hydrofluoride ( $\text{NH}_4\text{HF}_2$ ) and ammonium fluoride ( $\text{NH}_4\text{F}$ ) ( LAL500).

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29 (New). A method according to claim 27, wherein the contaminating impurity is at least one element selected from periodic table group 1 elements or periodic table group 2 elements.

30 (New). A method according to claim 27 wherein the contaminating impurity element is at least one element selected from the group consisting of Na, K, Mg, Ca, and Ba.

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